

REMARKS

Summary

Claims 1-6 are pending. Claim 1 has been rewritten. No new matter has been added as a result of this amendment.

Rejection of Claims

Claims 1-3 were rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg (U.S. Patent 5,825,308) and Claims 4-6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg in view of Watanabe (U.S. Patent 6,285,347). Applicant has rewritten Claim 1 and submits that Claim 1 overcomes the rejection.

Claim 1 recites that the image information display apparatus comprises, inter alia, a display unit that displays image data, an input unit that scrolls the image data displayed on the display unit, and a control unit that controls the display unit and the input unit. The input unit has a manipulation unit, a position sensor that detects a manipulation state of the manipulation unit, and an actuator that supplies force-feedback to the manipulation unit. In the course of scrolling image data, the control unit calculates the declination of the angle between a direction from a reference point in the display unit to a prescribed point in the image data and a direction of manipulation of the manipulation unit, and controls drive of the actuator to decrease the force-feedback to be supplied to the manipulation unit with a decrease in the calculated declination.

Rosenberg does not anticipate or suggest such an arrangement. More specifically, Rosenberg does not teach, for example, a control unit that calculates the declination of the angle between a direction from a reference point in the display unit to a prescribed point in the image data and a direction of manipulation of the manipulation unit. In Rosenberg, the isometric function is dependent on the deviations and/or direction from the local origin (col. 43, lines 65-66). This is to say that Rosenberg teaches only that deviations from a particular local origin cause force-feedback to be supplied to the manipulation unit. In Rosenberg, this feedback is present, for example, when the cursor is in a particular area of the display.

However, the arrangement of Rosenberg is unlike the arrangement of Claim 1. In Claim 1, a predetermined direction between a reference point and a prescribed

point in the image data exists. The angle between this predetermined direction and the direction of manipulation of the manipulation unit is calculated. The drive of the actuator is controlled to decrease the force-feedback to be supplied to the manipulation unit with a decrease in the calculated declination. Rosenberg, on the other hand, does not teach that the force-feedback to be supplied to the manipulation unit is dependent on multiple parameters, in particular: the reference point, a specific prescribed point, and the manipulation direction.

Moreover, the Examiner refers to col. 36, lines 53-60 of Rosenberg as teaching an arrangement in which the control unit “controls drive of the actuator to decrease the force-feedback to be supplied to the manipulation unit with a decrease in the calculated deviation.” However, this passage has nothing to do with the control unit controlling feedback to the manipulation unit. It instead refers to (pressure) sensors of the manipulation unit that detect the user touch on the manipulation unit. Using these sensors, the user moves the cursor in the display, and may select a particular mode. Note that the previous portion of the same paragraph describes the differences between the isotonic and isometric modes (i.e. the manner in which a particular input is sensed). This portion of the paragraph merely describes an example of isotonic mode device operation rather than describing a method of feedback to the manipulation unit.

In addition, the Examiner refers to col. 44, lines 43-61 of Rosenberg as teaching an arrangement in which a visual display (e.g. ruler, color spectrum, thinness of cursor) of the deviation is present. However, such a feature has nothing to do with control of the actuator or force feedback to the manipulation unit – it merely indicates something that may be present on the display.

Referring to col. 10, lines 20-25 and col. 44, lines 8-46 of Rosenberg, none of these paragraphs, or any of the other paragraphs denoted by the Examiner recite the control unit of Claim 1. For example, col. 44, lines 8-46 merely indicates that a restoring force (spring return) exists and increases in magnitude the further the cursor is moved from the local origin, as well as variations such as the existence of a saturation region. As above, Rosenberg does not teach that the force-feedback to

be supplied to the manipulation unit is dependent on a specific prescribed point, a reference point, and the manipulation direction (as well as the angles therebetween).

Accordingly, for at least these reasons, Claim 1 is patentable over Rosenberg.

Claims 2-6 are claims dependent on allowable Claim 1, and are allowable, without more. As these claims are allowable as dependent claims, there is no requirement for a detailed traverse to be provided in order that the response to the Office action be complete.

However, with regard to Claims 4-6, the Examiner has indicated that Watanabe teaches that the prescribed point is a destination point of a map image. Watanabe is directed to a method of scrolling a screen in which an amount by which the pointer positioned at the displayed portion is shifted corresponds to a scrolling speed of the displayed portion of the digital map within the display screen (see, e.g., summary of the invention). As pointed out in the previous response provided to the USPTO on June 6, 2005, such an arrangement has nothing to do with force feedback; information is provided to the CPU regarding speed and direction of movement from the input is used to modify display of the pointer in the screen.

Applicant respectfully submits, however, that the Examiner has not provided a legally sufficient reason for asserting that the references are combinable. As indicated in MPEP 2143.01, "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." See also *In re Fritsch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992), "[t]he mere fact that the reference could be modified as proposed by the Examiner is not sufficient to establish a *prima facie* case of obviousness."

More specifically, there is no suggestion to incorporate the map display of Watanabe with the force feedback device of Rosenberg. Applicant submits that this constitutes improper use of hindsight and, as such, uses the Applicant's own teachings to bootstrap the rejection. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." *Para-Ordnance Mfg. v. SGS Importers Int'l*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir.

1995)(citing W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13(Fed. Cir. 1983)).

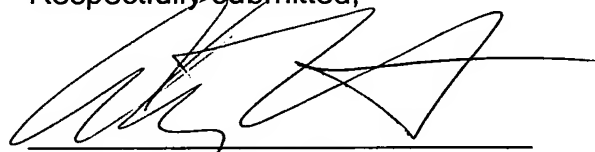
Even if motivation to combine Rosenberg and Watanabe existed, however, none of the cited references anticipate or suggest that the force-feedback is dependent on the angle between the manipulation direction of the manipulation unit and the direction between the prescribed and reference points. Further, none of the cited references anticipate or suggest specifically that the force-feedback is dependent on the angle between the manipulation direction and the direction between a destination on a map and a reference point.

Accordingly, for at least these reasons, Claims 4-6 are independently patentable over the cited art.

Conclusion

In view of the above, Applicant respectfully submits that all of the pending claims are in condition for allowance and seeks an allowance thereof. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorney or agent.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Anthony P. Curtis', is written over a horizontal line.

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